

Chapter 7:

Septic Systems/Real Property Subdivision



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Introduction

A wastewater disposal system is required for any structure to which a water supply is or will be connected. Subsurface sewage disposal (“septic systems”) must be designed, installed, operated, and maintained properly to ensure adequate protection of public health and the environment. DES licenses septic system designers and installers, reviews plans and specifications for proposed systems, and inspects systems after they have been installed but before they are covered and put into use. The subdivision of real property (*i.e.*, land and/or buildings) also requires a review by DES to ensure that each resulting parcel or unit has the appropriate infrastructure to support its intended uses without posing a threat to public health or the environment. DES implements this program under RSA 485-A:29-44 (“Water Pollution and Waste Disposal/Sewage Disposal Systems”, <http://gencourt.state.nh.us/rsa/html/indexes/485-A.html>) and NH CODE ADMIN. RULES Env-Ws 1000 (*Subdivision and Individual Sewage Disposal System Design Rules*, <http://www.des.state.nh.us/rules/envws1000.pdf>).

Designers and Installers Licenses

As noted, DES, through its Subsurface Systems Bureau (part of the DES Land Resources Management Program), licenses septic system designers and installers (see <http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm>). To obtain a designer’s license, an individual must take a written examination and a field exam; to obtain an installer’s license, an individual must take a written exam. The examinations are intended to ensure that designers can design appropriate systems for a variety of site and use conditions, and that installers can install the designed system.

Septic System Approval for Construction/Operation

The DES Subsurface Systems Bureau reviews the design plans and specifications for proposed septic systems to ensure the proper construction and operation of the systems. Proper design, construction, and operation rely heavily on the proper siting of such systems on a building lot. Proper siting depends on depth to seasonal high water table, presence or absence of ledge outcrops, slope, the presence or absence of subsurface soil characteristics and layering that will be conducive to downward percolation. This includes consideration of depth to seasonal high water table, presence or absence of ledge outcrops, slope, the presence or absence of subsurface soil characteristics and layering that will be conducive to downward percolation of the wastewater for treatment, and proper setbacks from property lines, drinking water wells, wetlands, surface waters, and structures. The development of many new, innovative designs and techniques for septic systems have allowed lots that were once viewed as “unbuildable” to be reclassified to support some types of limited development without causing undue harm the environment (see <http://www.des.state.nh.us/factsheets/ssb/ssb-12.htm>). Once a septic system has been properly sited on a parcel of land and the design plans have been approved by DES and, if required, the municipality (see www.des.state.nh.us/ssb/townapproval.htm), DES will issue an Approval for Septic System Construction. The septic system must be installed by an individual permitted to do so by DES, unless an individual homeowner does the work for his/her own home. Once the septic system is installed, DES will inspect the newly-constructed system within seven business days after receipt of a written request for inspection from the installer or owner (see <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-29.htm> and <http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm>). The inspections are conducted to ensure that the proper materials were used in constructing the system and that the design intent has been met. The DES inspector also will evaluate the system to ensure that setbacks to seasonal high water, wetlands, and surface waters have been met. Once the inspector has determined that the system meets all applicable requirements, a written Approval for Septic System Operation will be completed, with a copy provided to the owner, municipality, and DES. Requests for field inspections can be made by telephoning the appropriate DES Subsurface Systems Bureau field offices (located statewide), but should be followed by a written request for

inspection. Pursuant to RSA 485-A:38 (“Water Pollution and Waste Disposal/Approval to Increase Load on a Sewage Disposal System”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-38.htm>), an Approval for Septic System Construction also must be obtained prior to commencing any modifications, additions, or replacements of any structure which would result in an increase in the load on the existing septic system and prior to converting a structure to full-time occupancy. Under certain conditions, septic systems can be repaired and/or system components can be replaced without obtaining a new Approval for Septic System Construction. See Env-Ws 1003.10 and <http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm> for criteria, limits, and conditions.

Real Property Subdivision

The proposed subdivision of real property, and proposed conversion of existing buildings to condominiums where septic systems will be used, must be based on a consistent, statewide set of criteria and performance standards. DES’s goal in reviewing proposed subdivisions is to balance the protection of property rights and support of economic development with preservation of natural resources and protection of public health and the environment. Plans submitted to DES for subdivision approval must show all lots and must identify and depict ledge, slope topography, soil types, location of drinking water wells (including protective well radii, see <http://www.des.state.nh.us/ssb/wellradi.pdf>), existing or planned waterlines, and location of proposed septic system areas. Structures from which wastewater will be discharged may not be built, other land development activity specific to the proposed subdivision may not commence, and subdivided lots or units may not be sold, leased or rented until DES issues an Approval for Subdivision. DES’s review is intended to prevent the creation of lots that may not support the long-term wastewater assimilation needs of future inhabitants without causing environmental damage, overload, or a public health risk. Subdivision approval is required for both residential and commercial developments, including light industrial parks, manufactured housing parks, recreational campgrounds, and residential housing lots.

Major Land or Condominium Subdivisions

In addition to requiring DES review, proposals for subdivisions which might, at any time, include more than 15 lots must be registered with and reviewed by the Consumer Protection and Antitrust Bureau of the New Hampshire Department of Justice (“NHDOJ”) (see <http://webster.state.nh.us/nhdoj/Consumer/cpb.html>), pursuant to RSA 356-A (“Land Sales Full Disclosure Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-A.html>) and NH CODE ADMIN. RULES Jus 1300 (“Land Sales Full Disclosure Rules”, <http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf>). A similar registration and review by the NHDOJ must occur when more than 10 condominium units are to be established or sold; these reviews are conducted pursuant to RSA 356-B (“Condominium Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-B.html>) and NH CODE ADMIN. RULES Jus 1400 (“Condominium Rules”, <http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf>). For important zoning information, please contact your local municipal officials.

Local Subdivision Requirements

Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Related guidance is available in **Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations** (see <http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf>), **Data Requirements for Site Review: Guidance for Planning Boards** (see <http://www.state.nh.us/osp/library/docs/SiteReview.pdf>), and in the **Subdivision and Site Plan Review Handbook** (see <http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf>) offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: <http://www.state.nh.us/osp/index.html>

Allied Programs

For work near lakes, ponds, and rivers, plans must be certified to meet or exceed the development standards set forth by RSA 483-B (“Comprehensive Shoreland Protection Act”, <http://gencourt.state.nh.us/rsa/html/indexes/483-B.html>). It is recommended that applicants review the DES publication entitled, ***The Critical Edge - Shoreland Protection Reference Guide*** (see <http://www.des.state.nh.us/cspa/FILES/Lawrules.pdf>) for assistance with those requirements. The New Hampshire Lakes Management and Protection Program focuses its attention on proposed projects (and their potential impacts) in or adjacent to New Hampshire’s more than 800 lakes and ponds, pursuant to RSA 483-A (“New Hampshire Lakes Management & Protection Program”, <http://gencourt.state.nh.us/rsa/html/indexes/483-A.html>; see also <http://www.des.state.nh.us/factsheets/r&l/rl-1.htm>). Staff of the Rivers Management and Protection Program provide expert advice and review concerning impacts within (or in close proximity to) New Hampshire’s major river systems, pursuant to RSA 483 (“New Hampshire Rivers Management & Protection Program”, <http://gencourt.state.nh.us/rsa/html/indexes/483.html>; see also <http://www.des.state.nh.us/factsheets/r&l/rl-2.htm> and <http://www.des.state.nh.us/rivers/>). Finally, most municipalities have local subdivision requirements that must be met in addition to the State requirements.

Summary

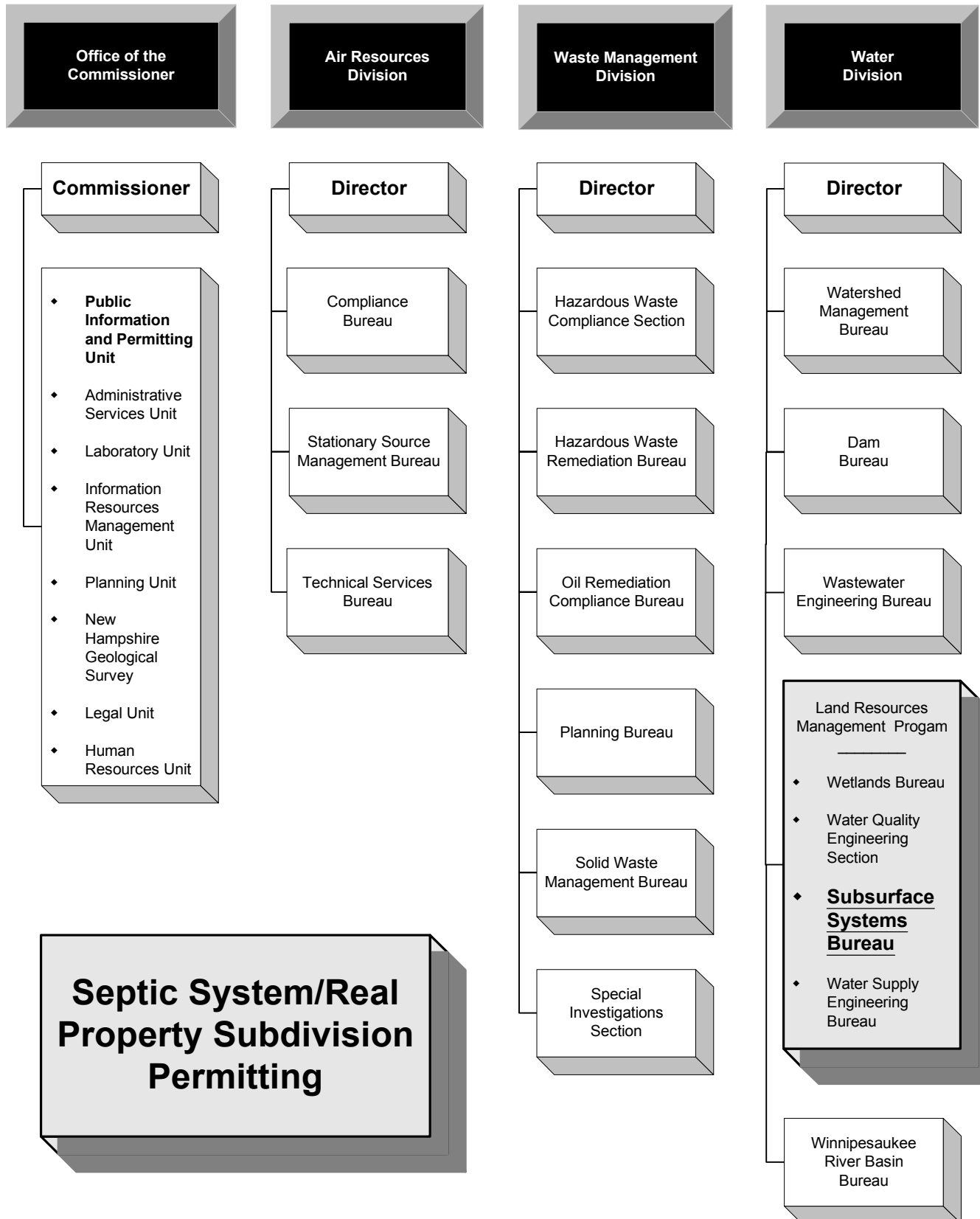
The DES Water Division, Subsurface Systems Bureau, implements the Subsurface Systems/Real Property Subdivision Program (see <http://www.des.state.nh.us/ssb/>). Decisions on plans and specifications are subject to the reconsideration and appeal provisions of RSA 485-A:40 (“Water Pollution and Waste Disposal/Reconsideration and Appeal Procedure”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-40.htm>). Appeals of orders issued for violations of RSA 485-A:29-44 or Env-Ws 1000 should be directed to the Water Council (see <http://www.des.state.nh.us/councils/#1>).

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Organizational Chart

New Hampshire Department of Environmental Services



Approval for Septic System Construction/Operation

Introduction: Approximately 75 percent of the homes and businesses in New Hampshire are served by on-site septic systems. In response to development pressure and more stringent siting requirements, new technologies have been applied to septic system design, thereby allowing use of many real estate parcels which were previously considered non-buildable due to ledge, steep slopes, small lot size, high groundwater, or setback requirements from wetlands and the protected shoreland. What was once considered a “non-buildable lot” may now be capable of supporting a residence, by using a chambered system, an upslope pump system, a raised leach field, a pressure distribution network, or another form of effluent disposal system (see <http://www.des.state.nh.us/factsheets/ssb/ssb-12.htm>). As the field of septic system design has progressively become more technical and specialized, DES’s approvals for the construction and operation of these (sometimes innovative) onsite wastewater treatment systems has similarly evolved to the process described here. Two separate approvals are needed for these septic systems: an Approval to Construct and an Approval to Operate. The first approval is required prior to constructing of a septic system or for any building from which wastewater will discharge; the second is required for actual use of the septic system (see <http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm>). The intent is to ensure that septic systems are designed, constructed, operated, and maintained to prevent nuisance conditions from being created, by efficiently removing or treating contaminants in the household wastewater before its eventual release back into the natural environment. Pursuant to RSA 485-A:38 (“Water Pollution and Waste Disposal/Approval to Increase Load on a Sewage Disposal System”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-38.htm>), construction approval also must be obtained prior to commencing any modifications, additions, or replacements of any structure which would result in an increase in the load on the existing septic system and prior to converting a structure to full-time occupancy. Septic systems with an aggregate flow capacity of 20,000 gallons per day or more must also obtain a DES Groundwater Discharge Permit. Lots located in close proximity to a municipal sewer interceptor must connect to a municipal sewer system for off-site wastewater treatment and disposal, pursuant to RSA 147:8 (“Nuisances; Toilets; Drains; Expectoration; Rubbish and Waste/Toilets; Drains”, <http://gencourt.state.nh.us/rsa/html/X/147/147-8.htm> and <http://www.des.state.nh.us/factsheets/wwt/web-1.htm>). Finally, some communities require local review and approval of septic design plans before they are submitted to DES. Review the most recent list of these communities at <http://www.des.state.nh.us/ssb/townapproval.htm>.

Number of approvals issued in calendar year 2001: 8,339 (construction)/5,981 (operation)

Fee: \$90 per septic system submission

Estimated processing time after application is deemed “complete”: 15 work days

Approval duration: 90 days for failed system replacement (see <http://www.des.state.nh.us/factsheets/ssb/ssb-1.htm>), and 4 years for all other construction approvals. DES may extend the expiration date under certain circumstances, and upon written request from the owner/applicant. There is no expiration date for operation approvals.

Approval transferability: Approval for Construction may be transferred by requesting an *Application for Transfer* at <http://www.des.state.nh.us/ssb/transfer.pdf>, filling out, and returning it to DES for processing.

Approval modification: If significant changes to the design plans occur, or the project cannot be constructed as approved, application for a new Approval for Construction must be made to DES (see <http://www.des.state.nh.us/factsheets/ssb/ssb-3.htm>).

Approval renewal: If construction has not been initiated within four years from the date of issuance, the Approval for Construction is deemed to have expired and a new Approval for Construction must be obtained.

State statute: RSA 485-A: 1, 2, and 29 - 44 ("Water Pollution and Waste Disposal/Sewage Disposal Systems", <http://gencourt.state.nh.us/rsa/html/indexes/485-A.html>)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", <http://www.des.state.nh.us/rules/envws1000.pdf>)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", <http://gencourt.state.nh.us/rsa/html/21-O/21-O-7.htm>; see also <http://www.des.state.nh.us/rules/env-wc200.pdf> and <http://www.des.state.nh.us/councils/#1>)

Additional information: N. H. DES, Subsurface Systems Bureau, at (603) 271-3501
N. H. DES, Public Information Center, at (603) 271-2975 or (603) 271-8876
U. S. Dept. of Agriculture, NRCS, at (603) 223-6023 or (603) 868-7581
(For additional soils information, see http://www.nh.nrcs.usda.gov/Soil_Data/)

Approval for Septic System Construction/Operation - Work Sheet

Key Qualifier Questions: Will the building/structure discharge domestic wastewater discharging to an on-site subsurface waste disposal system ("septic system")? Are you proposing to modify or replace any structure which would result in an increase in the load on the existing septic system? Are you proposing to convert an existing structure served by a septic system to full-time occupancy? Do you need to repair or replace an existing septic system that serves a commercial building, or whose effluent disposal portion is within 75 feet of surface water or water supply wells, or within 24 inches of the seasonal high water table? (See RSA 485-A:2, IV, "Water Pollution and Waste Disposal/Definitions", <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-2.htm> and <http://www.des.state.nh.us/factsheets/ssb/ssb-1.htm>).

What must you do to apply?

- Obtain and review an *Application for Individual Sewage Disposal System Approval* from the DES Subsurface Systems Bureau, the DES Public Information Center, or access online at <http://www.des.state.nh.us/ssb/protect.pdf>.
- Retain a DES-licensed septic system designer (see <http://www.des.state.nh.us/ssb/des-inst.htm>) to supervise the digging of test pits and to prepare the records for soil horizon depths, descriptions, colors, structure, compaction, estimated seasonal high water table, and other relevant site characteristics (see http://www.nh.nrcs.usda.gov/Soil_Data/).
- Plans for small disposal systems must be prepared by a permitted designer, except for a single family residence where the owner may prepare the design for his or her own domicile (see <http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm>).
- Have the permitted designer conduct a percolation test and record the results at the proposed septic system site (see <http://www.des.state.nh.us/factsheets/ssb/ssb-7.htm>).
- Check with local officials (i.e., Health Officer, Building Inspector, etc.) to find out whether or not the municipality has any more stringent design requirements for septic systems (e.g., more restrictive setback distances) and whether or not the municipality is one of the approximately 80 New Hampshire communities that require local review and approval of the plans and application before they are submitted to DES (see <http://www.des.state.nh.us/ssb/townapproval.htm>).
- Have the septic system designer prepare detailed plans for the proposed septic system according to NH CODE ADMIN. RULES Env-Ws 1000 (*Subdivision and Individual Sewage Disposal System Design Rules*, <http://www.des.state.nh.us/rules/envws1000.pdf>) and any more stringent local requirements.
- Plans for disposal systems with a flow greater than 2,500 gallons per day, or for systems with flows greater than 600 gallons per day on ledge lots, shall be designed by, and bear the stamp of, a permitted designer who is also a civil or sanitary engineer registered to practice in the state of New Hampshire (see <http://www.state.nh.us/jtboard/pe.htm>).
- Plans must show all existing and proposed ground surface contours at two-foot intervals at least 75 feet from the building and system on the plans. Contour elevations must be established from a secure benchmark.
- Plans must show the distance and location of the nearest surface water or wetland in relation to the proposed effluent disposal system or, if the nearest surface water is greater than 75 feet away, a statement must be included in the application to that effect.
- Plans must show all lot dimensions, location of existing and proposed buildings, wells and their protective radii (see <http://www.des.state.nh.us/ssb/wellradi.pdf>). If all radii setbacks cannot be achieved, include with the plans a completed copy of the DES *Release Form for Protective Well Radii* (see <http://www.des.state.nh.us/ssb/release.pdf>), pursuant to RSA 485-A:30-b ("Water Pollution and Waste Disposal/Sewage Disposal Systems/Protective Well Radii", <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-30-b.htm>). This form will be recorded at the appropriate Registry of Deeds so as to run with the land.
- Show benchmarks and tie points to landmarks or established referenced points within 100 feet of the system.

- Show all areas of exposed ledge or boulders greater than 6 feet in diameter within 75 feet of the proposed system.
- Show all invert elevations at house foundation wall, septic tank, distribution box, leach lines and bed bottom elevation of effluent disposal area. Invert elevations shall be referenced to the benchmark.
- Show on the plans the make, type, model and capacity of sewage pump, pump well, and discharge line; make, type and model of pump controls; and elevations of control switches.
- Show on the plan the cross section, profile view, and layout of proposed effluent disposal system (with dimensions).
- Submit three (3) complete sets of plans showing the designer's stamp, professional engineer's stamp (if applicable) and town stamp (if applicable), a completed *Application for Individual Sewage Disposal System Approval* form, and a check or money order for \$90 per system made payable to "Treasurer, State of New Hampshire" to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: <http://www.des.state.nh.us/ssb/>
- **Note:** The Approval for Construction satisfies the first requirement of a two-step approval process - it allows the owner to construct the septic system (only) in accordance with the approved plans. The second requirement is to obtain the Approval for Operation to actually operate the system as designed, which should bear the same approval number as shown on the Approval for Construction.
- Once the owner has had an approved system installed by a DES-permitted installer (or a homeowner has done so for his or her own domicile) and DES has inspected it, only then is an Approval for Operation granted for its use (see <http://www.des.state.nh.us/factsheets/ssb/ssb-8.htm>).

What types of projects require these approvals?

- ❖ Residential homes, apartments, condominiums, and manufactured housing parks
- ❖ Beds & breakfasts, hotels, and motels
- ❖ Churches, schools, and recreational campgrounds
- ❖ Restaurants and diners
- ❖ Conversions of summer cottages to year-round dwellings
- ❖ Renovations to an existing structure that will increase the load on the existing septic system (e.g., addition of bedrooms to a residence, conversion of a residential structure to a commercial use, etc.)

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Approval for Real Property Subdivision

Introduction: Pursuant to RSA 485-A:29, I (“Water Pollution and Waste Disposal/Submission and Approval of Plans and Specifications”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-29.htm>), DES regulates the subdivision of land into two or more lots if the proposed lots will not be served by municipal sewers (see <http://www.des.state.nh.us/factsheets/www/web-1.htm>) and one (or more) of the proposed lots is less than five acres, or if one or more of the proposed lots lie within the 250-foot shoreland protection zone (see <http://www.des.state.nh.us/factsheets/sp/sp-6.htm>). Subdivision approval must also be obtained for proposed conversion of existing buildings to condominiums where septic systems are, or will be, used. Any person seeking subdivision approval must file an application and plans with DES for review and approval. The intent of this approval is to ensure that development is based on a consistent, statewide set of design criteria and performance standards. DES seeks to balance the protection of property rights and support of economic development with preservation of natural resources and the protection of public health and safety. Plans submitted to DES for subdivision approval must show all lots and must identify and depict ledge, slope topography, soils types, location of drinking water wells (including protective well radii, see <http://www.des.state.nh.us/ssb/wellradi.pdf>), existing or planned waterlines, and location of proposed septic system areas. Structures from which wastewater will be discharged may not be built and other site alteration activity specific to the proposed subdivision may not commence, and subdivided lots or units may not be sold, leased or rented until DES issues an Approval for Subdivision. For work near lakes, ponds, and rivers, plans must be certified to meet or exceed the development standards set forth by RSA 483-B (“Comprehensive Shoreland Protection Act”, <http://gencourt.state.nh.us/rsa/html/indexes/483-B.html>). Proposals for subdivisions which might, at any time, include more than 15 lots must be registered with, and approved by, the Consumer Protection and Antitrust Bureau of the New Hampshire Department of Justice (“NHDOJ”, see <http://webster.state.nh.us/nhdoj/Consumer/cpb.html>), pursuant to RSA 356-A (“Land Sales Full Disclosure Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-A.html>) and NH CODE ADMIN. RULES Jus 1300 (“Land Sales Full Disclosure Rules”, <http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf>). A similar registration and review by the NHDOJ must occur when more than 10 condominium units are to be established or sold. These reviews are accomplished pursuant to RSA 356-B (“Condominium Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-B.html>) and NH CODE ADMIN. RULES Jus 1400 (“Condominium Rules”, <http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf>). Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Related guidance is provided in **Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations** (see <http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf>), in the document entitled **Data Requirements for Site Review: Guidance for Planning Boards** (see <http://www.state.nh.us/osp/library/docs/SiteReview.pdf>), and in **Subdivision and Site Plan Review Handbook** (see <http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf>) offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: <http://www.state.nh.us/osp/index.html>

Number of lots/units approved in calendar year 2001: 3,175

Fees: \$80/lot or unit

Estimated processing time after application is deemed “complete”: 30 calendar days

Approval duration: No expiration limit

Approval transferability: Although not required, requesting an *Application for Transfer* form at <http://www.des.state.nh.us/ssb/transfer.pdf>, filling it out and returning it to DES for processing will serve to properly transfer the Approval for Subdivision to another party.

Approval modification: If significant changes in the scope or design of the project occur after approval has been issued, application must be made to request a new Approval for Subdivision.

Approval renewal: No expiration limit

State statute: RSA 485-A: 1, 2, and 29 - 44 ("Water Pollution and Waste Disposal/Sewage Disposal Systems", <http://gencourt.state.nh.us/rsa/html/indexes/485-A.html>)

N. H. Code of Administrative Rules: Env-Ws 1000 ("Subdivision and Individual Sewage Disposal System Design Rules", <http://www.des.state.nh.us/rules/envws1000.pdf>)

Appeals body: Water Council at RSA 21-0:7 ("Department of Environmental Services/Water Council", <http://gencourt.state.nh.us/rsa/html/21-O/21-O-7.htm>; see also <http://www.des.state.nh.us/rules/env-wc200.pdf> and <http://www.des.state.nh.us/councils/#1>)

Additional information: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
N. H. DOJ, Consumer Protection and Antitrust Bureau, (603) 271-3641

Approval for Real Property Subdivision - Work Sheet

Key Qualifier Question: Will this project depend on individual septic systems for on-site waste disposal and create lots of less than five acres in size; or create lots of more than five acres in size, but be located within the protected shoreland; or represent a conversion or expansion of an existing subdivision, a proposed condominium, a proposed recreational campground, or a proposed manufactured housing park? ^{1, 2, 3}

Note 1: If all lots and units in a subdivision will be served by a municipal sewer system, then you do not need an Approval for Subdivision from DES.

What must you do to apply?

- Retain the services of a land surveyor, licensed to do work in the State of New Hampshire (see <http://www.state.nh.us/jtboard/lis.htm>), to survey the perimeter property boundary lines, prepare a plan to show their delineation, and establish the lot size.
- Obtain an *Application for Subdivision Approval* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at <http://www.des.state.nh.us/ssb/subaprov.pdf>.
- On the plans, show all existing easements and rights-of-way granted to the property owner and other parties.
- Show all existing topographic contours at five-foot intervals.
- Provide a location map with sufficient detail to enable the DES reviewer to locate the property.
- Retain the services of a DES-licensed septic system designer (see <http://www.des.state.nh.us/ssb/des-inst.htm>) to supervise the digging of test pits, prepare the excavation logs, and record soil horizon descriptions, colors, degree of compaction, structure, and depth to groundwater on each lot or proposed on-site wastewater disposal site.
- Have the permitted designer conduct a percolation test and record the results for each lot or proposed onsite wastewater disposal site.
- Show the acreage for each proposed lot and indicate the lot number designations.
- Show all areas within the proposed subdivision, or within 75 feet from the perimeter of the property, that are unsuitable for in-site wastewater disposal, such as ledge outcrops, steep slopes, seasonal wet areas, streams, brooks, rivers and wetlands.
- Show all existing or proposed waterlines and wells, as well as the protective well radii (see <http://www.des.state.nh.us/ssb/wellradi.pdf>).
- Show all existing and proposed drainage structures, including inlets, culverts and swales.
- Show all proposed dredge and fill areas.
- Show all soil mapping delineations. See county soils information at the U. S. Department of Agriculture's Natural Resources Conservation Service at http://www.nh.nrcs.usda.gov/Soil_Data/.
- If applicable to the subdivision proposal, submit copies of the following associated DES authorizations:
 - Site Specific Permit (RSA 485-A:17) (see <http://www.des.state.nh.us/sitespecific/>)
 - Groundwater Discharge Permit (NH CODE ADMIN. RULES Env-Ws 1500) (see <http://www.des.state.nh.us/dwspp/gwdisch.htm>)
 - Standard Dredge and Fill Permit (RSA 482-A) (see <http://www.des.state.nh.us/wetlands/>)
 - Drinking Water Supply Approval (RSA 485:8) (see <http://www.des.state.nh.us/wseb/>)
- Submit the completed application, two copies of the plans (stamped by the land surveyor) with the soils data (stamped by the permitted septic system designer), and a check or money order for \$80 per lot or unit made payable to "Treasurer, State of New Hampshire" to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: <http://www.des.state.nh.us/ssb/>

What types of projects require this approval?

- ❖ Condominium conversions of apartments, cabins, campgrounds, hotels, and marinas
- ❖ Light industrial parks
- ❖ Manufactured housing parks
- ❖ Recreational campgrounds
- ❖ Residential housing lots
- ❖ Proposals when more than 10 condominium units are to be established or sold (see RSA 356-B, “Condominium Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-B.html>) and NH CODE ADMIN. RULES Jus 1400 (“Condominium Rules”, <http://webster.state.nh.us/nhdoj/Consumer/condorules.pdf>)
- ❖ Proposals for subdivisions which might, at any time, include more than 15 lots (see RSA 356-A, “Land Sales Full Disclosure Act”, <http://gencourt.state.nh.us/rsa/html/indexes/356-A.html>) and NH CODE ADMIN. RULES Jus 1300 (“Land Sales Full Disclosure Rules”, <http://webster.state.nh.us/nhdoj/Consumer/Land%20Sale%20Rules.pdf>)

Note 2: Some communities require local approval of individual septic systems prior to DES’s review pursuant to RSA 485-A:32, I and II (“Water Pollution and Waste Disposal/Prior Approval; Permits”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-32.htm>). A list of these communities is available at <http://www.des.state.nh.us/ssb/townapproval.htm>.

Note 3: Many municipalities also have local subdivision requirements that must be met in addition to the State requirements. For information on such requirements, please contact your local municipal officials. Further, related guidance is provided in the document entitled **Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations** (see <http://webster.state.nh.us/osp/library/docs/RequirementsForSoilsAndWetlandsData.pdf>), the document entitled **Data Requirements for Site Review: Guidance for Planning Boards** (see <http://www.state.nh.us/osp/library/docs/SiteReview.pdf>), and in the **Subdivision and Site Plan Review Handbook** (see <http://webster.state.nh.us/osp/library/docs/SubdivisionAndSitePlanReviewHandbook.pdf>). These documents are offered by the New Hampshire Office of State Planning. Telephone: (603) 271-2155; fax: (603) 271-1728; or online: <http://www.state.nh.us/osp/index.html>

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Designer of Subsurface Disposal Systems License

Introduction: In 1979, the New Hampshire Legislature enacted RSA 149-E:3, X (effective January 1, 1980) to require all subsurface wastewater disposal (“septic system”) designers to be licensed by the State of New Hampshire (see <http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm>), except for homeowners who design a septic system for their own single-family residences (see <http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm> and <http://www.des.state.nh.us/ssb/repair1.pdf>). RSA 149-E:3, X was re-codified effective January 1, 1990 as RSA 485-A:35 (“Water Pollution and Waste Disposal/Permit Eligibility; Exemption”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-35.htm>). To ensure that disposal systems are properly designed, DES administers examinations twice per year (spring and fall), through which designer candidates can demonstrate the extent of their knowledge and skill in this field based on prior education, familiarity with the legal requirements, and past experience in the field (see application form at <http://www.des.state.nh.us/ssb/designer.pdf>). The designer’s exam consists of three written portions and a field test for soil interpretation. There is a fee of \$40 to take the exam, and an annual renewal fee of \$40, due by December 31. If a designer pays his or her annual renewal fee on time, it is not necessary to retake the examination (see <http://www.des.state.nh.us/ssb/des2.pdf>).

Number of active designer licenses in New Hampshire: 900

Fees: \$40 per exam; \$40 per renewal

Estimated processing time for licensing decision after exam is passed: 5 days

License duration: All permits expire annually on December 31

License transferability: Not transferable

License modification: Not applicable

License renewal: Annually

State statute: RSA 485-A:35 (“Water Pollution and Waste Disposal Act/Permit Eligibility; Exemption”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-35.htm>)

N. H. Code of Administrative Rules: Env-Ws 1000 (“Subdivision and Individual Sewage Disposal System Design Rules”, <http://www.des.state.nh.us/rules/envws1000.pdf>)

Appeals body: Water Council at RSA 21-O:7 (“Department of Environmental Services/Water Council”, <http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm>; see also <http://www.des.state.nh.us/rules/env-wc200.pdf> and <http://www.des.state.nh.us/councils/#1>)

Additional contacts: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
(See also http://www.des.state.nh.us:1522/des/ONESTOP.SSWT_MENU.show)

Designer of Subsurface Disposal Systems License – Work Sheet

Key Qualifier Question: Do you wish to design residential or commercial on-site subsurface waste disposal (“septic systems”) in New Hampshire?

What must you do to apply?

- Obtain and review a copy of the DES Fact Sheet No. WD-SSB-4 entitled *Permitting of Installers and Designers of Subsurface Sewage Disposal Systems* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at <http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm>.
- Obtain, fill out and submit an *Application for Permit - Designer of Subsurface Disposal System*. This application also can be obtained from the DES Subsurface Systems Bureau, DES Public Information Center, or online at <http://www.des.state.nh.us/ssb/designer.pdf>.
- Include a recent photograph of yourself with the application.
- Have the application notarized prior to submittal.
- Obtain a copy of the most recent examination schedule for designers from the DES Subsurface Systems Bureau or DES Public Information Center.
- You may wish to purchase the following documents from the DES Public Information Center to help you prepare for this examination:
 - ***Subdivision and Individual Sewage Disposal System Design Rules*** (\$10)
 - ***Soil Manual for Site Evaluation in New Hampshire*** (\$15)
 - Make checks or money orders payable to “Treasurer, State of New Hampshire”.
- Study these materials in preparation for the written examination and the “practical” soils examination (to be held in the field).
- Submit the application, a check or money order for \$40 made payable to the “Treasurer, State of New Hampshire”, and all supporting materials to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: <http://www.des.state.nh.us/ssb/>
- If the designer’s examination needs to be retaken, complete and submit the *Application to Retake Designer’s Exam* (<http://www.des.state.nh.us/ssb/des2.pdf>) with a check or money order for \$40 to the DES Subsurface Systems Bureau for scheduling.

What types of projects require the services of a licensed septic system designer?

Design of new septic systems, replacement systems for all commercial buildings, and any expansion or conversion of an existing building which would result in an increase in sewage loading (see NH CODE ADMIN. RULE Env-Ws 1003.10) will require the services of a DES-licensed designer. Examples include:

- ❖ Additional seating capacity in bars, lounges, churches, hairdressers, restaurants, and town halls requires a new design and installation
- ❖ Additional bedrooms in apartments, houses, rooming houses, hotels, and nursing homes are considered to be an increase in sewage loading and require a new design and installation
- ❖ The conversion of a seasonal residence to year-round occupancy is considered to be an increase in sewage loading and requires a new design and installation
- ❖ For a more complete listing of the various categories of changes and how to calculate the sewage loading for each one, refer to Table 1008-1, found on page 58 (of 111) entitled “Unit Design Flow Figures”, in Env-Ws 1000 (“Subdivision and Individual Sewage Disposal System Design Rules”, <http://www.des.state.nh.us/rules/envws1000.pdf>).

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

Installer of Subsurface Disposal Systems License

Introduction: In 1979, the New Hampshire Legislature enacted RSA 149-E:3-a (effective January 1, 1980) to require all subsurface wastewater disposal (“septic system”) installers to be licensed by the State of New Hampshire, except for homeowners who install a septic system for their own single-family primary residences (see <http://www.des.state.nh.us/factsheets/ssb/ssb-9.htm> and <http://www.des.state.nh.us/ssb/repair1.pdf>). RSA 149-E:3-a was re-codified effective January 1, 1990 as RSA 485-A:36 (“Water Pollution and Waste Disposal/System Installer Permit”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-36.htm> and <http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm>). To ensure that disposal systems are properly installed, DES administers examinations twice per year (spring and fall) through which installer candidates can demonstrate the extent of their knowledge and skill in this field based on prior education, familiarity with the legal requirements, and past experience in the field (see application form at <http://www.des.state.nh.us/ssb/installer.pdf>). The installers must pass a two-part written examination only. There is a fee of \$40 to take the examination, and an annual renewal fee of \$40, due by December 31. If an installer pays his/her annual renewal fee on time, it is not necessary to retake the examination (see <http://www.des.state.nh.us/ssb/ins2.pdf>).

Number of active installer licenses in New Hampshire: 2,060

Fees: \$40 per exam; \$40 per renewal

Estimated processing time for licensing decision after exam is passed: 5 days

License duration: All licenses expire annually on December 31

License transferability: Not transferable.

License modification: Not applicable

License renewal: Annually

State statute: RSA 485-A:36 (“Water Pollution and Waste Disposal/Sewage Disposal Systems/System Installer Permit”, <http://gencourt.state.nh.us/rsa/html/L/485-A/485-A-36.htm>)

N. H. Code of Administrative Rules: Env-Ws 1000 (“Subdivision and Individual Sewage Disposal System Design Rules”, <http://www.des.state.nh.us/rules/envws1000.pdf>)

Appeals body: Water Council at RSA 21-O:7 (“Department of Environmental Services/Water Council”, <http://gencourt.state.nh.us/rsa/html/I/21-O/21-O-7.htm>; see also <http://www.des.state.nh.us/rules/env-wc200.pdf> and <http://www.des.state.nh.us/councils/#1>)

Additional contacts: N. H. DES, Subsurface Systems Bureau, (603) 271-3501
N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876
(See also http://www.des.state.nh.us:1522/des/ONESTOP.SSWT_MENU.show)

Installer of Subsurface Disposal Systems License – Work Sheet

Key Qualifier Question: Do you wish to install residential or commercial on-site subsurface waste disposal (“septic systems”) in New Hampshire?

What must you do to apply?

- Obtain and review a copy of the DES Fact Sheet No. WD-SSB-4 entitled *Permitting of Installers and Designers of Subsurface Sewage Disposal Systems* from the DES Subsurface Systems Bureau, DES Public Information Center, or online at <http://www.des.state.nh.us/factsheets/ssb/ssb-4.htm>.
- Obtain, fill out and submit an *Application for Permit - Installer of Subsurface Disposal System*. This application also can be obtained from the DES Subsurface Systems Bureau, DES Public Information Center, or online at <http://www.des.state.nh.us/ssb/installer.pdf>.
- Include a recent photograph of your self with the application.
- Have the application notarized prior to submittal.
- Obtain a copy of the most recent Designer/Installer Examination Schedule from the DES Subsurface Systems Bureau or the DES Public Information Center.
- You may wish to purchase the pertinent rules entitled **Subdivision and Individual Sewage Disposal System Design Rules** (\$10) from the DES Public Information Center. Make checks or money orders payable to “Treasurer, State of New Hampshire”.
- Study the rules in detail in preparation for the two-part written examination.
- Submit the application and all supporting documents before the deadline date, as indicated on the schedule.
- Submit the application, a check or money order for \$40 made payable to the “Treasurer, State of New Hampshire”, and all supporting materials to: Subsurface Systems Bureau, Water Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, NH 03302-0095. Telephone: (603) 271-3501; fax: (603) 271-6683; or online: <http://www.des.state.nh.us/ssb/>
- If the installer’s examination needs to be retaken, complete and submit the *Application to Retake Installer’s Exam* (<http://www.des.state.nh.us/ssb/ins2.pdf>) with a check or money order for \$40 to the DES Subsurface Systems Bureau for scheduling.

What types of projects require the services of a licensed septic system installer?

Installation of new septic systems, replacement systems for all commercial buildings, and any expansion or conversion of an existing building which would result in an increase in sewage loading (see NH CODE ADMIN. RULE Env-Ws 1003.10) will require the services of a DES-licensed installer. Examples include:

- ❖ Additional seating capacity in bars, lounges, churches, hairdressers, restaurants, and town halls requires a new design and installation
- ❖ Additional bedrooms in apartments, houses, rooming houses, hotels, and nursing homes are considered to be an increase in sewage loading and require a new design and installation
- ❖ The conversion of a seasonal residence to year-round occupancy is considered to be an increase in sewage loading and requires a new design and installation
- ❖ For a more complete listing of the various categories of changes and how to calculate the sewage loading for each one, refer to Table 1008-1, found on page 58 (of 111) entitled “Unit Design Flow Figures”, in Env-Ws 1000 (“Subdivision and Individual Sewage Disposal System Design Rules”, <http://www.des.state.nh.us/rules/envws1000.pdf>).

If there are any questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.

